

DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES

Communicable Disease Control

Lyme Disease (tick borne borreliosis, Lyme arthritis)

What is Lyme disease?

Lyme disease is caused by bacteria transmitted by a certain type of tick called *Ixodes scapularis*. Lyme disease may cause symptoms affecting the skin, nervous system, heart and/or joints of an individual.

Why is it called Lyme disease?

The first cluster of disease cases associated with this infectious agent was discovered near Lyme, Connecticut.

Who gets Lyme disease?

Males and females of all ages can get Lyme disease. People who spend time outdoors in tick-infested environments where ticks are infected are at an increased risk of exposure. Ticks known to transmit Lyme disease have not been found in Montana.

How is Lyme disease spread?

The bacteria that causes Lyme disease is part of a natural cycle of the deer tick feeding on animals such as mice, opossums, dogs, or deer. Certain stages of the tick, especially the nymph, can feed on a human and, if the tick is infected with the bacteria, can cause an infection in man. Cases of Lyme disease have also been reported in dogs and horses. Person to person spread of Lyme disease does not occur.

What are the symptoms of Lyme disease?

The illness usually occurs during the summer months and generally starts as a circular reddish expanding rash around or near the site of the tick bite. Multiple rash sites may occur. During the rash stage, or occasionally prior to the rash, other symptoms such as fever, headache, fatigue, stiff neck, muscle and/or joint pain may be present. These may last for several weeks. If left untreated immediate complications such as meningitis, facial palsy or heart abnormalities may occur. Swelling and pain in the large joints may recur over many years.

How soon do symptoms occur?

Symptoms usually begin within a month of exposure.

Does past infection with Lyme disease make a person immune?

Information available at present indicates that reinfection is possible.

What is the treatment for Lyme disease?

Current therapy include the use of antibiotics.

What can be done to prevent the spread of Lyme disease?

Special precautions to prevent exposure to ticks should be used such as wearing light colored clothing and tucking pants into socks and shirts into pants. Repellents containing DEET applied to clothing may prevent tick attachment. The control of rodents around the home may be helpful. If trapping mice at or near home, extreme care should be taken to dispose of carcasses with a minimum of exposure, since ticks attached to the mice might attach to the skin of the trapper. If exposed to tick infested areas, family members should help to check body surfaces for attached ticks.

How should a tick be removed?

To remove an attached tick, grasp with tweezers or forceps as close as possible to attachment (skin) site, and pull upward and out with a firm and steady pressure. If tweezers are not available, use fingers shielded with tissue paper or rubber gloves. Do not handle with bare hands. Be careful not to squeeze, crush or puncture the body of the tick which may contain infectious fluids. After removing the tick, thoroughly disinfect the bite site and wash hands. See or call a doctor if there is a concern about incomplete tick removal. It is important that the tick be removed as soon as it is discovered. Check after every two to three hours of outdoor activity for ticks attached to clothing or skin. If removal occurs within three hours after attachment, the risk of tick-borne infection is reduced.